ABSTRACT OF THE DISCLOSURE

The present invention relates generally to data processing systems, in particular, to high speed data communication and chip-to-chip data transfer.

The data transferring apparatus comprises:

a data input and data output;

a plurality of data transferring sections operable in parallel for transferring data as data words having bit width which is a multiple M of the bit width of the input data and a circuit for synchronising said parallel data transferring sections;

a programmable frequency clock generator for generating a clock signal, said programmed frequency including a full-frequency and low-frequency, the low frequency being equal to ~~quotient of~~ the full frequency divided by ~~and~~ the number of said data transferring sections;

wherein said data transferring sections operate at said low frequency; while said input and output data are provided at ~~said~~ full frequency.

Preferably, the data transferring apparatus further comprises a multiplexer that receives wide data words ~~from said data transferring sections~~ at said low frequency and provides multiplexed output data at ~~said~~ full frequency.

The invention is particularly applicable to computer-controlled automatic test systems for testing integrated circuits, more particularly, to memory test systems which interface with high speed protocol memories such as synchronous DRAM, in particular DDR.